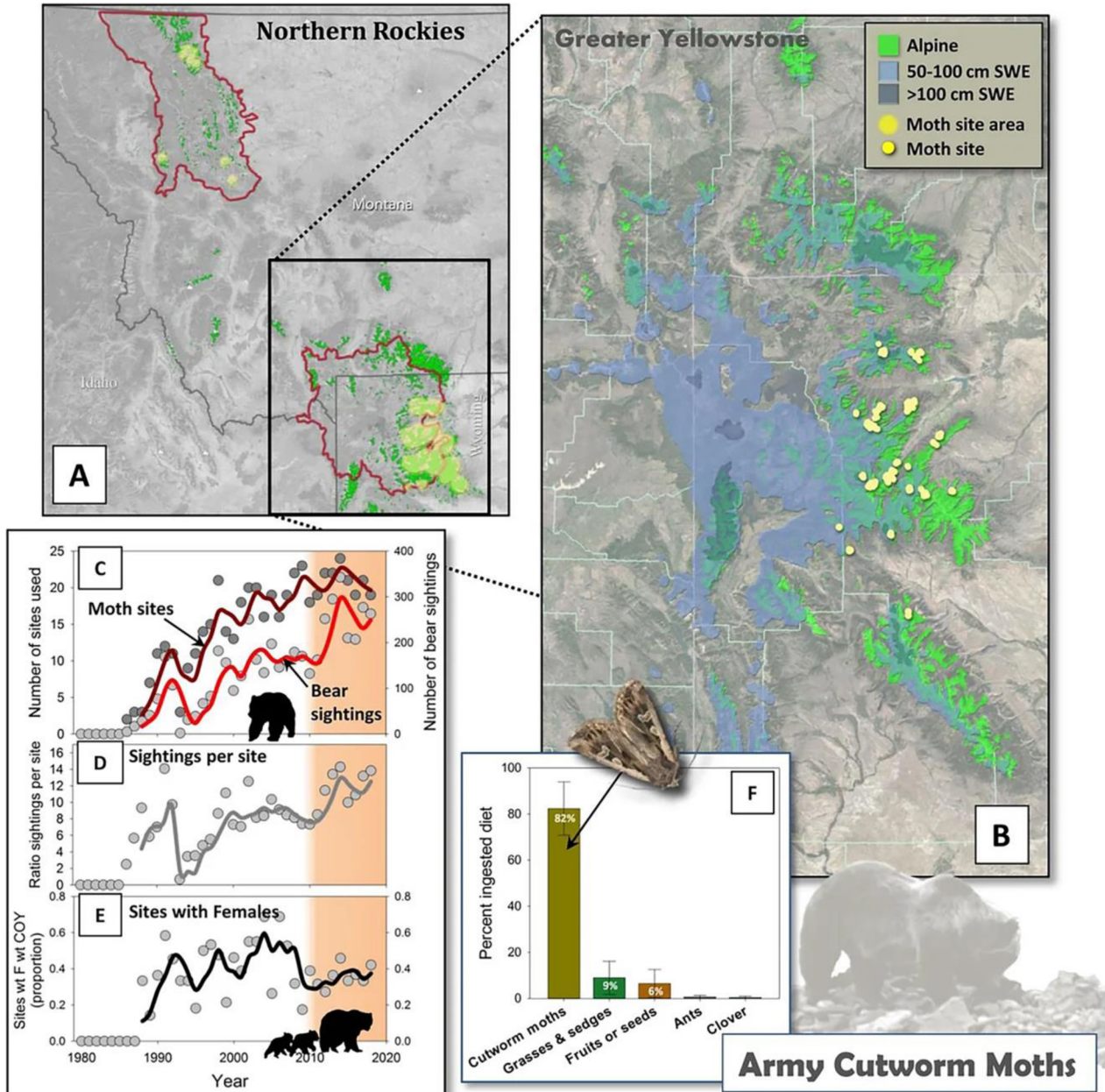


# Trends in Availability & Consumption of Army Cutworm Moths

*Grizzly Times* <https://www.grizzlytimes.org/trends-in-habitat>

by David Mattson



These graphics show locations of sites in the US Northern Rocky Mountains where grizzly bears consume moths while aggregated in alpine areas (in yellow in maps [A] and [B]), as well as trends in use of moth sites during 1980-2018 for grizzly bears in the Greater Yellowstone Ecosystem (GYE; C-E). As illustrated in map (B), moth sites are located exclusively in alpine areas (shown in green) that are not subject to heavy snowfall (denoted by blue; areas of >50 dm snow water equivalent). Use of moth sites by grizzlies in the GYE dramatically increased from essentially nil in 1985 to the point where most bears in the Absaroka Mountains exploited these sites during the 2000s (C). Numbers of bears seen per site have varied over time (in D), reaching a nadir during 1992 and jumping substantially to high sustained levels after 2011 coincident with terminal losses of whitebark pine seeds as a food source for grizzlies (denoted by vertical orange shading). The importance of moths to bears concentrated near moth sites is illustrated in (F) by the comparative fractions of different foods consumed by bears in these locales, with moths accounting for over 80% of the total.